Nov 1989 89/11 01

B·A·R·G NEWS

©Monthly Newsletter of the Ballarat Amateur Radio Group

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89/11 02

BALLARAT AMATEUR RADIO GROUP INCORPORATED
OFFICERS 1988-1989

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B.A.R.G. meets on the LAST FRIDAY in every month except December at the Ballarat Education Centre, Hopetoun St., Ballarat at 7.30 p.m.

Committee meetings are held at the Education Centre on the Wednesday two weeks prior to the Club meeting at 7.30 p.m. Executive committee members are expected to attend and any club member with business for discussion is welcome.

All correspondence to: The Sectretary, BARG Inc., P.O. Box 216E, Ballarat East, 3350.

Applications for Awards to: Maurie Batt, RSD, Rokewood Junction, 3351.

ORPHEUS
RADIO MUSEUM

CNR. RING RD. & WESTERN HWY BALLARAT
(OPEN 10AM - 5 PM 7 DAYS A WEEK)

FEATURES
• GRAMOPHONES • VINTAGE RADIOS • VISITORS PARTICIPATION
• MEMORABILIA • AUDIO DISPLAYS • DEMONSTRATIONS • CRYSTAL SETS

The "Orpheus Radio Museum" is operated by Richard and Sonja Wilson,
The collection includes their private collection, the 3BA collection and other items on loan to the museum.
The museum is run with the idea of preserving the history of radio in Australia and making it accessible to the public.
If anyone has any information or items of interest to the museum, would they please contact, or write to, the "Orpheus Radio Museum" RSD B98, Ballarat 3352. Telephone (053) 34 2513.
Let the public enjoy your piece of Radio History.

R. Fletcher & Sons Print, 53 Peel St. Sth., Ballarat. Ph.: (053) 33 1233.

89/11 03

MINUTES OF GENERAL MEETING HELD 27th OCTOBER 1989.

MEETING OPENED by President Gordon KGC at 7.50pm with 23 members and 3 visitors ZBC,CIF and TOM in attendance.

APOLOGIES VK3 DS,NIZ,SE,CFH,AEX,VU,PUA.

MINUTES of previous meeting as circulated were confirmed. CAZ/DOK.

CORRESPONDENCE from Clarrie ex DMK now VK4 CMC greetings to members.
from Chris Edmondson editor ARA with congratulations on quality of Newsletter.
Both these communications received via VKS AAI and VK3 RPC.

TREASURERS REPORT General a/c 965.65 VS&L a/c $1424.90.
$1000.00 transferred to convention account. KGL/KAY

QSL MANAGER Jeff PAP received a small number of cards,his very good idea of registering all BARG members was not permitted by WIA!

EDUCATION Ian AXH has received all information relating to devolvement of exams and is getiing organised to present a report to the Club.Morse code practice sessions for the Australian Air League conducted by Reg CAZ and John CFH are proceeding well.

PUBLICITY Kevin WN got us good coverage in the Ballarat News on Hamvention.

CLUB NET is being quite well supported on both 2mtrs and 3.610.

NEWSLETTER usual comment!'PLEASE LET US HAVE SOME MATERIAL'

WICEN Gordon KGC attended the area meeting in Ballarat and intends to start Club exercises in the near future.

TECHNICAL The new repeater for RBA is nearly completed and only requires the power supply to be a goer.

GENERAL BUSINESS. Moved ADB seconded BNC that 25% of the profit from the 1989 Hamvention be allocated to prizes for 1990 Hamvention. Motion Carried.

Moved DOK seconded AXH that the November meeting be a Xmas breakup to be held at John HW's QTH. Carried.

Jeff PAP reported that JOTA went quite well although propagation was poor.5 members took part in the exercise.

HAMVENTION Kevin WN the Hamvention Co-ordinator gave a full report on the Hamvention preparations and allocated jobs to be filled.

Moved AXH seconded VEJ that a slab of beer or something of equilavent value be donated to Sunnycrust manager in appreciation of his assistance in supplying bread at no charge,notonly this year but for the last 6 years. Motion carried.

MEETING CLOSED at 9.10pm. 73s Jim CFB.

####################

NEXT BARG MEETING. 6.30pm on Friday November 24th at the QTH of John HW in Walker St,(look for the antenna tower)Bar-B-Que and meat will be supplied.BYO drinks.

HAVE A HAPPY CHRISTMAS.

89/11 04

Q.S.L. BUREAU

I spoke to VK3 CCY Doug, re: the Bureau and the latest information from the organisers is as follows:

1. Each operator must individually register with the VK3 Inwards Bureau at this address -

   VK3 Inwards QSL Manager
   Moorabbin & District Radio Club
   P.O. Box 88
   BENTLEIGH EAST, VIC. 3165

2. They must list all call signs and send address label from A.R. where possible.

3. If you are not a member of the W.I.A. it will cost you $24, payable per year, starting 1st February, 1990, to the Moorabbin & District Radio Club.

4. The Club or myself cannot register anyone. As we thought, VK3 CCY has been told by the powers that be that all individuals must register themselves.

If you have any questions give me a call, as per phone numbers on the front of the magazine, or come up on the Thursday club net.

Don't forget, if you want your cards it is your responsibility to register with the Moorabin Club.

VK3 PAP, JEFF.

For Sale

FT-75 B YEASU TRANSCEIVER
Complete with X-TALS - EXT. VFO
Mobile DC supply and home base AC supply

*****

SCANNER - UNIDEN BEARCAT - BC 140
10 channel scanner
Frequency range:
28 - 54 Mhz.
136 - 174 Mhz.
412 - 512 Mhz.

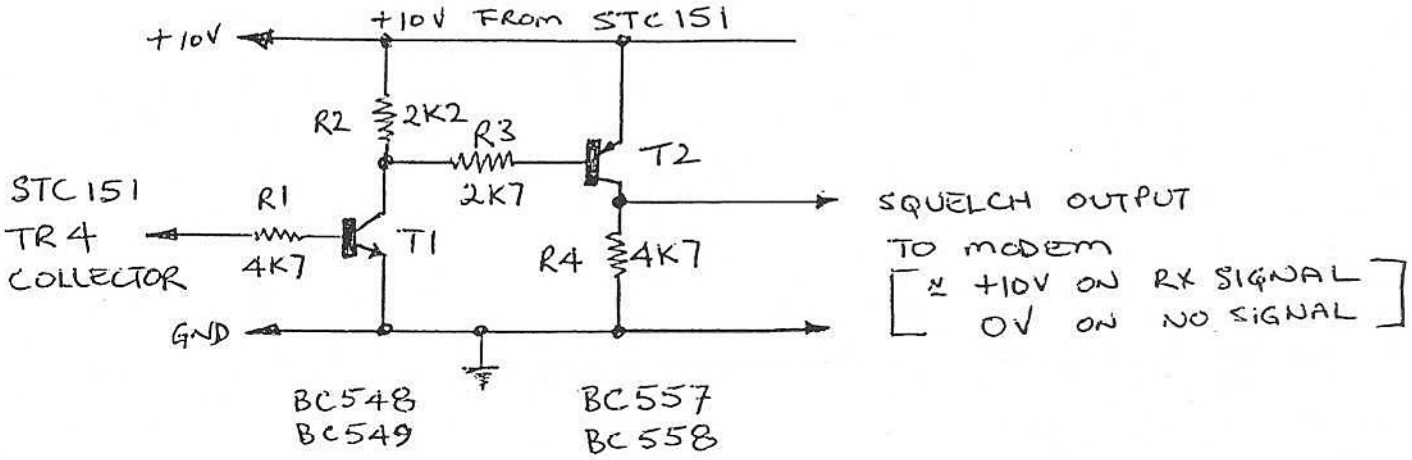
*****

FRG 7 Receiver with DIGITAL display
FM and SQUELCH FITTED
with external speaker.

*****

FOR INFORMATION PHONE:
Peter - VK3TBN on (03) 4584804

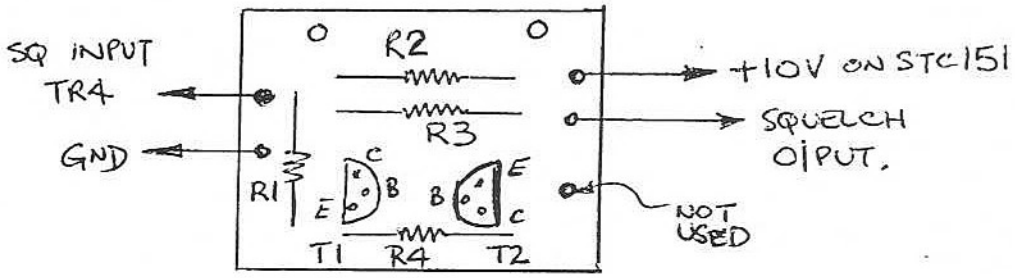
STC 151's AND PACKET RADIO. 89/11 05



NORMAL

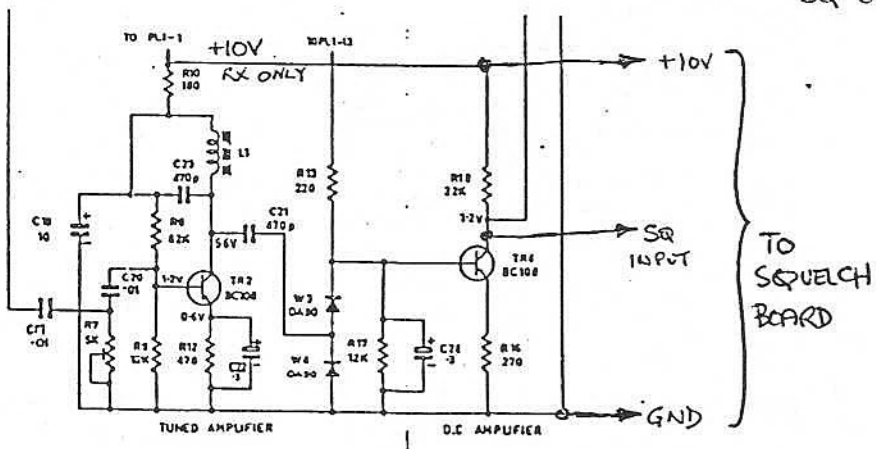
BC548/558 BASE VIEW

[CAN VARY FROM BRAND TO BRAND]

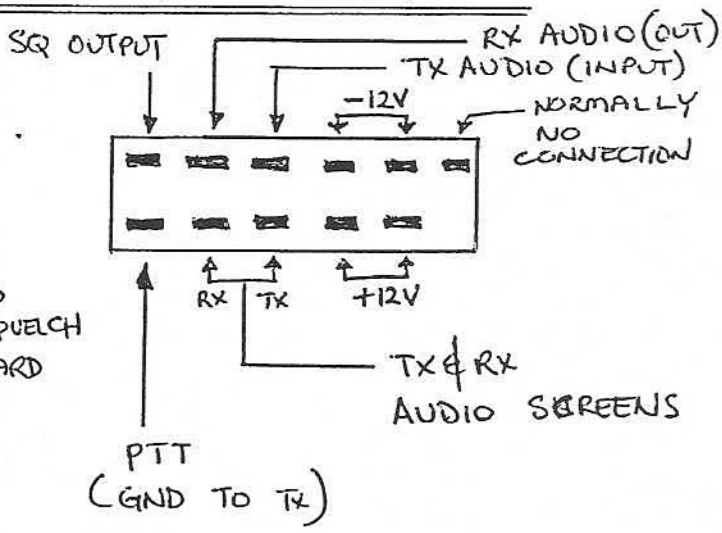


COMPONENT OVERLAY FOR VK3KAW SQUELCH BOARD

SQUELCH BOARD [STC151]



STC 151 SQUELCH CCT.

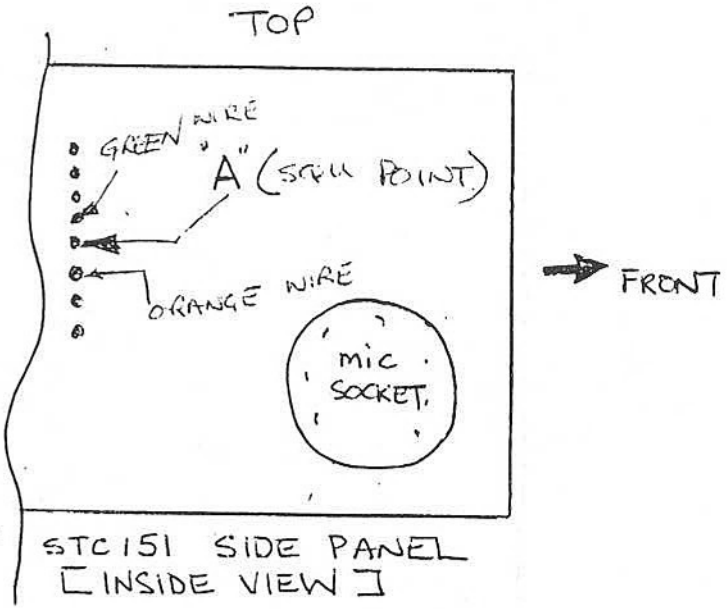


STC151 POWER CONNECTOR

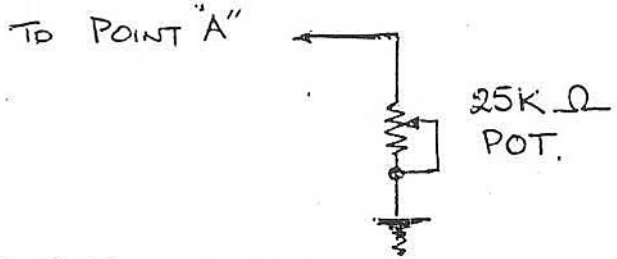
[THIS IS STANDARD ON ALL MPRG STC151's.]

I HAVE OTHER MODS AVAILABLE FOR DE-EMPHASIS REMOVAL AS WELL AS FASTER SQUELCH MODS, AND EXTERNAL SQUELCH CONTROL. ON STC151's.

REGARDS MERV VK3KAW

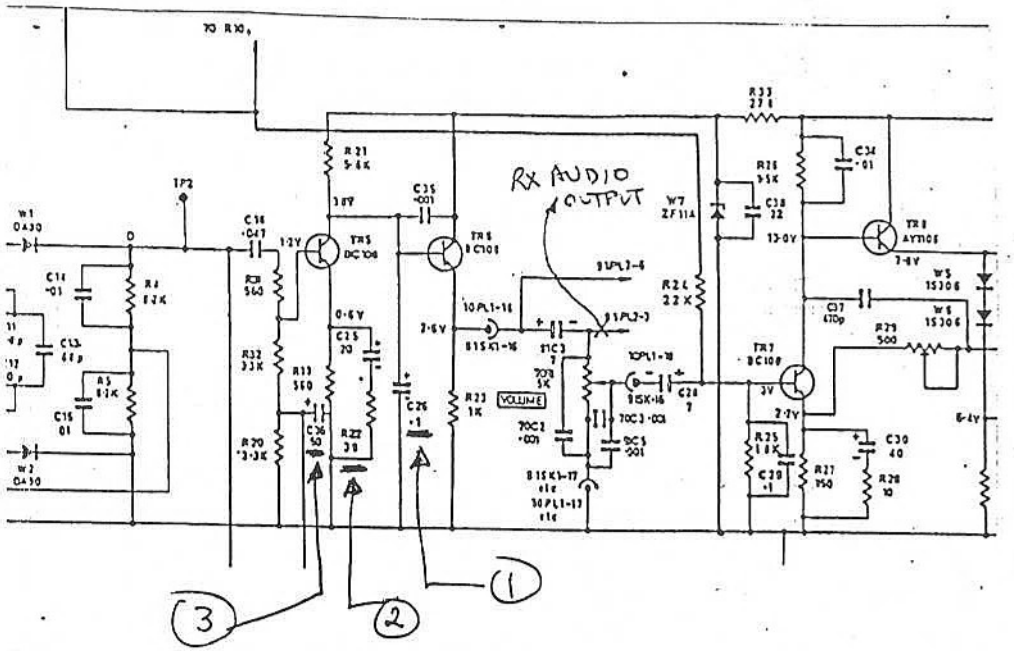


STC 151 SIDE PANEL
[INSIDE VIEW]



EXTERNAL SQUELCH CONTROL ON STC 151

89/11 06



FASTER SQUELCH & REMOVAL OF DE-EMPHASIS

1/ REMOVE C26
2/ CHANGE R22 TO 150 Ω
3/ CHANGE C36 TO 15 μF OR 22 μF TANT.
4/ AUDIO TAKE OFF IS ON "HOT" SIDE OF VOLUME CONTROL.

STC 151 MODIFICATIONS

REGARDS MERV. VK3KAW.

89/11 07

A "NO CLAIM" BONUS

This is a suggested addition to Bob BNC's "cheap Insurance" circuit.
It becomes fairly easy to add over current/short circuit protection to the suggested circuit with a few resistors and a p-n-p transistor.
Most high current power supplies use multiple pass transistors to carry the current without over-stress. So naturally enough these transistors are usually fitted with "current sharing" resistors which ensure that the current supplied to the load is handled in roughly equal shares by all the series-pass transistors.
Inspecting the circuit of the power supply will usually show high wattage resistors of value between 0.1 and 0.3 ohms in series with the emitters of the pass transistors as show below in Fig.1

Under normal full load current conditions the voltage drop across each resistor will be of the order of 0.7 volts at least.
This drop does not normally matter since the 'headroom' of the power supply is usually greater than this by quite a large amount and anyway it is 'inside' the control loop and so is compensated for by the regulator circuit. If the circuit is modified, as shown, by adding the extra components then it becomes "overload/short circuit proof"ed.
The 10R resistors serve to provide the necessary isolation between each transistor to avoid disturbing the "current-sharing". The p-n-p transistor can be a small-signal type and its collector is connected to the junction of the 15v zener and the 470R resistor show in Bob's suggested circuit.
If the transistor is a silicon device then if the voltage drop across the resistors R1, R2, etc. exceeds about 0.6v the transistor will be turned on and so will trip the over-volt circuit.
RV1 will enable adjustment of the trip current. For lower current tripping it may pay to use a germanium transistor which will operate when the voltage drop is of the order of 0.35 volts.
The cake can be "iced" further by fitting a d.c. milliameter with suitable series multiplier resistor across the 2K2 and RV1 which will then, after calibration, read the value of current delivered to the load. A lot cheaper than an accurate 20 Amp meter if you want to measure the current to the rig.

Modified circuit Fig. 2.

FIG. 1

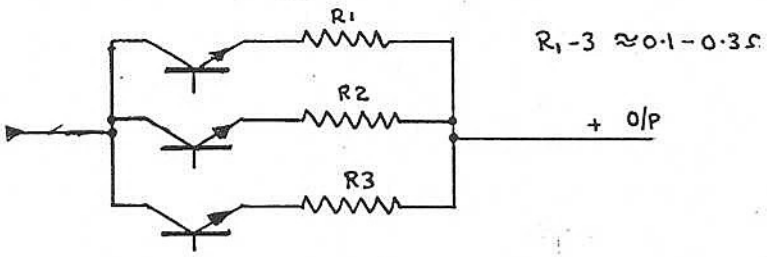
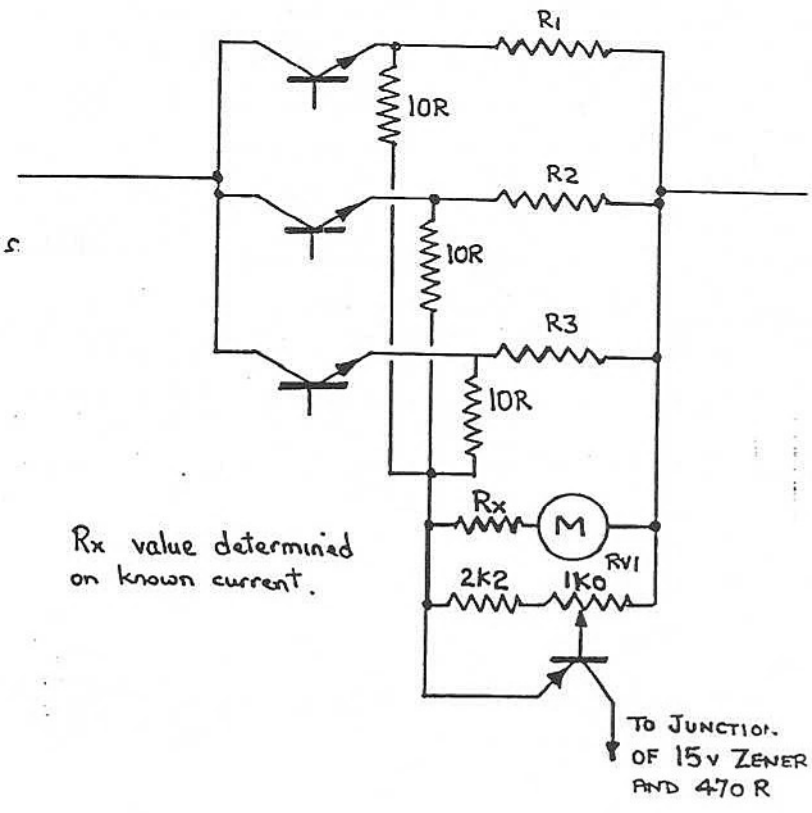


FIG. 2



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08

Minuutes of Western Zone General Meeting held at Lake Bolac Hotel on Saturday 27th May 1989 following the AGM.

Meeting was opened at 1435 hours by President Ken, VK3KAV.

Present: VSX AKW KAV NBV BFF TAI DLO ZGT KZZ YLV KIT CAI NVR AEU KJH.

Apologies: ATN AGD DTO BARG XEX KJH VNQ CUH KN.

Minutes: Minutes of the previous meeting held on the 27th August 1988 were read and received on the motions of VSX/AKW. Carried....

Finances: Bank Balance showed a credit of $524.58... Moved received by KIT/CAI.... Carried..

Correspondance: Outward Correspondance was sent to 3WV, Vic Div re invitation to meeting, FTAC re 1240 Mhz Band, VTAC re 430Mhz repeater, Dept Radio and Communications re permission to enter compound at Mt William, Ken Simpson re letter of thanks, Vic Div re secretary resignation, Sympathy card to BV.

Inward Correspondance from Dept Aviation, thanks from BV, Vic Div re 430Mhz repeater and invite to meeting, Federal Office re 1240 Mhz band. Moved received by KZZ/AEU.. Carried...

General Business: KAV spoke of the problems of the inwards QSL bureau and the possible solutions. Moved Resolution CAI/KZZ we write to Vic Div and ask them to seriously re-think any alterations to running of the bureau. We feel it can only be run efficiently from one distribution point...Carried..

Because of the problems of attendance at meetings last year the feeling of the meeting was we run committee meetings this year when necessary and have one General meeting in November. Suggested dates are 26/8,and 25/11.

Executive Minutes From 29/4 were read at the meeting.

Ken KAV thanked everyone for their attendance.

Meeting closed at 1558 hours.

Bob Pitcher VK3NBV
Sec/Treas

Minutes of Executive Meeting of the Western Zone WIA VIC DIV held at Ken Taylors (VK3KAV) home, 11 May Street Hamilton on August 26. 1989.

The meeting was called to order at 1341.

Apologies, Bob NBV, Rob CAI.

Present AEU, KIT, KZZ, VSX, YLV, ZGT, KAV.

Minutes Minutes were read by KAV, moved received by AEU, YLV carried

Treasurers Report $524.48..

Correspondance Received from WIA, minutes of 2 meetings, re allocating of Divisional Funds to Zones, accounting procedures etc, DOTC stating procedures for operating Zone Station. Hamilton District Radio Club re BWZ roster. Correspondance was discussed at length. Arising from that, Secretary Treasurer was nominated as the delegate to attend November meeting in Melbourne, moved KZZ, KIT and carried..

KZZ, VSX moved the BWZ nett continue in its present form. Carried..

YLV moved the Secretary contact Barry Wilton and VTAC advising that VK3DTO (Andrew Squires) will pick up 70cm repeater in approx 2 weeks when in Melbourne, but will ring prior to arrange pick up times. Seconded VSX carried..

KIT, ZGT moved a letter be sent to Ken James stating that if the 2 metre replacement is ready to go Andrew Squires will pick it up in about 2 weeks but will phone to arrange pick up details. Carried..

Moved KZZ a vote of thanks to Ken and Evelyn for the afternoon tea and for the use of their QTH on such a cold day..Carried

Meeting closed at 1510 hours with Evelyn serving afternoon tea to those present.

President.

Reminder.

Western Zone WIA General Meeting to be Held at the Lake Bolac Hotel on Saturday November 11 at 1330 hours..Bob VK3NBV. 055721786..

WIA News

89/11/09

NEW LICENCE FEES

All radiocommunications licence fees increase from 1 December 1989 across the board by 7.5 per cent.

Renewal notices now being issued under the customary six weeks in advance of their due expiry will include the new licence fee applicable for licences due on or after 1 December 1989

WIA 80 Award

Which WIA member will qualify for the WIA 80 Award certificate number 1?

Eligible contacts for this award, which celebrates the 80th anniversary of the world's first and oldest national radio society, can commence as from midnight on October 31st of this year.

The rules are detailed on page 4 of September 1989 issue of Amateur Radio magazine, but basically you need to contact, and exchange membership numbers with, 80 members of the WIA, between November 1st 1989 and December 31st 1990.

If past experience is any criteria,this will be a popular contest, and the award certificates much sought after.

1989 Ross Hull Contest

Despite a number of initiatives, interest in the annual Ross Hull Memorial Contest has been gradually falling away over recent years, with only a handful of the limited number of people participating in the contest actually bothering to submit a contest log.

Given the vast size of our country, and the relatively small and uneven geographical spread of our population, it is very difficult to arrive at rules for a VHF contest which are equitable to all Australian radio amateurs.

This problem has concerned our hard working Federal Contest Manager, Frank Beech, VK7BC, for quite some time (I am convinced that the position of Federal Contest Manager must be one of the most demanding of the volunteer positions in the WIA structure).

Frank recently submitted a proposal to the Executive for approval of a new set of rules for the 1989 Ross Hull Memorial Contest.

Executive examined the proposal with great deliberation, looking at both the advantages and the flaws, and finally agreed with all of Frank's proposals.

No one believes that these rules are going to solve all of the difficulties associated with this contest, but it is a different approach, and is a result of Frank listening to ideas and suggestions from a number of interested people.

These new rules will be published in detail in future issues of Amateur Radio, but the main changes are that the contest will take place over a shorter period, contestants will be able to operate from other locations than their home station for a couple of days during the contest, and the scoring system will be based on the Maidenhead Locator Squares.

If you are a VHF operator, give this year's Ross Hull Memorial Contest a try. And let us know how you think the new rules helped to make this year's contest a more interesting and exciting event.

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10

10 METER NEWS ****

FALL 1989

NEWS

MOBILE CALLING FREQUENCY: It has been suggested by Chuck Imsande, W6YLJ, that ten meters needs a Mobile Calling Frequency. 20 Meters has such a calling frequency at 14.336 used by the emergency and country hunter group. Chuck suggests that "Since the county hunters are now offering a five-band certificate, they have been using 28.336 as a 10 meter frequency. I would like to propose that 10 meter mobiles monitor 28.336 and after contact move to another frequency for rag-chews. It could be used as an 'emergency frequency' for road problems or disasters. This is the way the 20 Meter Emergency and County Hunters Net operates."

Chuck does a 10-10 column for WorldRadio. In September he talks about Andy Anderson, the 1000 Bars Manager. Chuck has a very interesting suggestion. Ten meter mobile is a great way to get more use on ten meters. Lets hear your comments. Better yet, lets start using 28.336 as a mobile frequency.

PRO 67 ANTENNA: For those of you who like a LARGE and HEAVY antenna maybe you have some interest in this Moseley antenna. It has double wall tubing in the middle to reduce sag. At nearly 100 lbs it is the ham that sags when putting it up. You need a heavy duty rotator or they will burn up in short order.

Reports are that the performance is very good. Front-to-back and front-to-side ratios are excellent. As one ham said, it is so good if you are not pointing in the direction of the opening you might think the band is dead. Gain is also very good in this antenna.

There seems to be a down side to it however. SWR curves show the antenna to be 1.5:1 SWR on ten meters. It is claimed to be a broadband antenna. However some individuals have found measurements of 2.5:1 in some portions of the band, which means, if you have a 440 or similar transceiver, will reduce power to 65-70 watts.

I understand that Moseley will come out with a modification for this antenna to improve the SWR, however that may only be on the WARC bands.

NO CODE LICENSE: ARRL Board of Directors have approved recommendation of No Code License. Privileges will be 220 MHz and up. The suggested title for this new class of license is Communicator. It is interesting that this is the same name used for the 1974 FCC proposal for a codeless license.

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10 METERS SOUNDS LIKE CB: In the opinion of at least some people the "Roger Beep" of the Uniden HR2510's makes the 10 meter band sound more like CB than ham radio. According to one source it only adds QRM to the band. The source suggest it be turned off. Comments???

HAM SATELLITES: There are five ham satellites due to be launched in November. PACSAT, LUSAT, DOVE, UoSAT D, and E. JAS-2 is due to go up in January.

UoSATs D and E, which after launch and separation from the launcher will probably become UoSAT-OSCAR 14 and 15, both have the same mechanical structure, weight and dimensions. They will be the first microsatellites separated from the ASAP - followed by the four Microsats, which from then on will be known as OSCARs 16, 17, 18, and 19.

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10 METER HF PACKET RADIO: According to the HF band plan for IARU Region 1 (Africa, Europe, the Middle East, Mongolia and the USSR), the ten meter will have a subband of 28.120-28.150 for packet radio.

RADIO SHACK 10M RIG: According to one source, the Radio Shack 10 meter rig is the Uniden chassis with a lot of the parts missing, which makes it cost less to purchase.

USSR LAUNCH DELAY: So much for reliable Russian sources. If you have been listening for the RS 12/13 satellites you can relax. Although the units are ready for launch it has been delayed until 1990. It seems the main payload is not needed in space yet. That main payload is a civilian navigational satellite on which these will ride piggy-back.

TEN-TEC SIMPLICITY: With today's push for more complexity at least one ham says the Ten Tec "feature" of simplicity sold him. The rig has a simple design and spacious cabinet interior. The Paragon is a radio, NOT an antenna tuner, a keyer, a capacitance meter or a floor wax!!! There is the feeling one could actually get inside it and fix it if it breaks, although the Ten Tec service is said to be very good.

But there are some problems. Spurious noise is one complaint. There are only a few spurs above S1, but the noises are very irritating on 10 meters where band noise is often low enough to allow the internal noise to be heard. I believe that much of the noise is generated by the multiplexing of the display, some of it is harmonics.

UNIDEN HR-2510 AT 75 WATTS: Word is that there is a modification for the HR-2510 which will allow you to transmit and receive from 26 Mhz to 30Mhz inclusive. This is for the pre 1989 models. Has anyone tried it? 75 watts inside of 25 could help those using it in mobile applications.

August 1989 of '73 Magazine offers a modification for the HR-2510. Has anyone tried it?

MORSE CODE OUT ON SHIPS: With all the talk about codeless ham licenses it might be worth while to note that the Maritime Services International is planning the demise of morse code on ships. By 1999 ships worldwide will not require a shipboard morse code radio operator for safety and distress signals. With satellites and maritime telex morse code operators will be eliminated entirely. Morse code is dying.

PIRATES ON TEN METERS: Some sources feel the unlicensed activity on ten meters has increased as a result of the Uniden's and Radio Shacks sale of relatively cheap SSB rigs. Although most feel that there are no more bootleggers today than there ever were most agree that 10 meter CW has a lot of Spanish speaking pirates in the southern California area.

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EXECUTIVE COMMITTEE 1989/90

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VICE PRESIDENT	Ian McDonald	VK3AXH	431717	311317
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	Maurie Batt	VK3XEX	422245	
	Ian Robinson	VK3BTX	358031	
	Murray Felstead	VK3AAI	412234	
NEWSLETTER EDITORS	Bob Terrill	VK3BNC	395317	391001
	Harry Hekkema	VK3KGL	357563	391001

PEPEATERS: VK3RBA - 146.750 Voice. Mt.Buninyong. (Ch.3)
VK3RBS - 146.900 Voice. Smeaton Hill. (Ch.6)
VK3RPC - 147.575 Packet. Mt.Buninyong.

CLUB NET : On 3.5610 Mhz.SSB +/- QRM.
Every Thursday at 8 PM.

MEETINGS : Held every last Friday of month at 7.30 PM. in the Ballarat Community Education Centre.
Hopetoun St.
Ballarat.

Chat-n-Chew
Coffee Lounge
14 Doveton St Nth. Ballarat
Ph 053 317303

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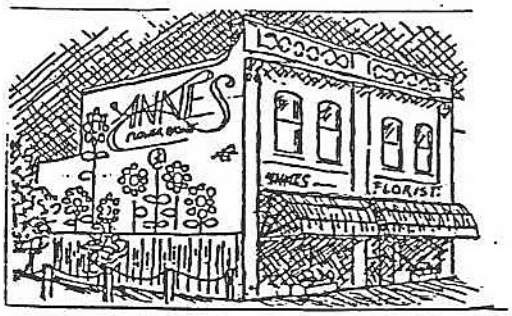

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